

COPY OF ALL CLAIMS PENDING

1. A photosensitive flexographic printing element for the production of flexographic printing plates for digital imaging by means of lasers, comprising at least
 - a dimensionally stable support,
 - at least one photopolymerizable layer, at least comprising an elastomeric binder, a polymerizable compound and a photoinitiator or photoinitiator system,
 - at least two laser-ablative layers A and B, each comprising at least one binder and also an IR absorber for laser radiation, and
 - optionally a removable, flexible protective film

wherein the at least one binder of layer A is an elastomeric binder and the at least one binder of layer B is a self-decomposing binder, and the optical density of the entire layer sequence of IR-ablative layers in the actinic spectral region is at least 2.5.

2. A photosensitive flexographic printing element as claimed in claim 1, wherein the self-decomposing binder of layer B contains nitro or nitrate ester groups.
3. A photosensitive flexographic printing element as claimed in claim 2, wherein the binder containing the nitro and/or nitrate ester groups is a cellulose or cellulose ether nitrate ester.
4. A photosensitive flexographic printing element as claimed in claim 1, wherein the elastomeric binder is a binder comprising diene units.
5. A photosensitive flexographic printing element as claimed in claim 1, wherein the IR absorber is carbon black.
6. A photosensitive flexographic printing element as claimed in claim 1, wherein the flexographic printing element has further IR-ablative layers.
7. A process for the production of a flexographic printing plate in which the starting material employed is a photosensitive flexographic printing element as claimed in claim 1, comprising the following steps:
 - (a) removal of the removable, flexible protective film, if present,
 - (b) writing of a mask into the layer system comprising IR-ablative layers by means of an IR laser,
 - (c) full area exposure of the photosensitive element to actinic light through the mask formed in step (b),

- (d) treatment of the intermediate formed in (c) with at least one developer solution, during which the residues of the IR-ablative layers which have not been removed in step (b) are removed and the exposed photopolymerizable layer is developed.
- 8. A process as claimed in claim 7, wherein step (b) is carried out using a laser apparatus having a rotating drum, and the flexographic printing element is mounted on this drum for ablation.